

Electromobility+

-Boosting the roll-out of electromobility in Europe-

Background

Increasing awareness on climate change, the scale of the challenges involved, and the pressing need to prepare for a post-petrol future have prompted most of the world's developed countries to step up the research, trialling and deployment of transport systems that use more energy-efficient and less petrol fuel-dependent vehicles. In response to the second objective on petrol dependency, electric power offers a potentially groundbreaking solution, provided that the production supply chain does not emit too much CO₂.

Transnational call Electromobility+

Within the frame of Electromobility+ ministries and funding agencies of 11 European countries and regions have joined for funding transnational research projects. The countries/regions involved are: France, Germany, The Netherlands, Austria, Finland, Norway, Sweden, Denmark, Poland, Flanders (Belgium), Piedmont (Italy).

The Electromobility+ call was launched in December 2010 and pools some 20 million EUR from the participating countries and regions as well as from the EC within the ERA-NET Plus scheme of the 7th Framework Programme.

The funding initiative aims at the creation of long-lasting conditions for the roll-out of electric mobility in Europe on the horizon of 2025 and covers the following thematic scope:

1. Energy and environmental policy approach
2. Usage patterns, economic models, actors involved
3. Technical dimensions of the recharging systems
4. Testing, trials and normative standards
5. Technology based Innovation

In total 40 proposals have been submitted. The evaluation of the proposals followed a 2-step procedure. Immediately after the closing of the call the evaluation on national/regional level started (step 1), followed by a peer-review of independent international experts (step 2). This evaluation process and the subsequent negotiation process resulted in funding of 18 research projects.



Research projects funded

The research projects funded are listed in the order of three key dimensions: Socio-economic issues, Technological strategies (including grid management) and Research & Development.

Socio-economic issues

- **SCelecTRA** - Scenarios for the electrification of transports (Countries involved: FR, AT, DE)
- **EV-STEP** - Sustainable Technical and Economic Pathways for Electrified Mobility Systems in EU27 by 2030 (Countries involved: FR, DE, DK)
- **eMap** - electromobility - scenario based Market potential, Assessment and Policy options (Countries involved: DE, FI, PL)
- **DEFINE** - Development of an Evaluation Framework for the INtroduction of Electromobility (Countries involved: AT, DE, PL)
- **SELECT** - Suitable ELEctromobility for Commercial Transport (Countries involved: DE, DK, AT)
- **COMPETT** - Competitive Electric Town Transport (Countries involved: NO, DK, AT)
- **E-FACTS** - Electric Vehicles For Alternative City Transport Systems (Countries involved: DE, NL, SE)

Technological strategies

- **EVERSAFE** - Everyday Safety for Electric Vehicles (Countries involved: SE, DE)
- **ABattReLife** - Automotive Battery Recycling and 2nd Life (Countries involved: FR, DE, NL)
- **EVREST** - Electric Vehicle with Range Extender as a Sustainable Technology (Countries involved: FR, DE, AT)
- **CACTUS** - Models and Methods for the Evaluation and the Optimal Application of Battery Charging and Switching Technologies for Electric Busses (Countries involved: DE, PL)
- **Speed for SMEs** - Systematic development of Propulsion systems for Enhanced Electromobility Drive trains (Countries involved: AT, DE)
- **DAME** - Development, validation and application of an agent based modelling approach for optimal integration of electromobility in electricity distribution grids (Countries involved: NL, DE)
- **NEMO** - Novel E-Mobility Grid Model (Countries involved: NL, DK, DE)

Research & Development

- **MATLEV** - New materials and technologies for lightweight generic components of electric low-emission concept vehicle (Countries involved: DE, PL)
- **MaLiSu** - Nanomaterials for future generation Lithium Sulphur batteries (Countries involved: DE, AT, SE)
- **K-VEC** - K-Vehicle: Ultrafast and distributed power charge system for high performance on-board energy storage devices (Countries involved: IT-21, DE)
- **FCCF-APU** - Fuel Cell operating on Conventional Fuels as Auxiliary Power Unit for Electrical Vehicles (Countries involved: DE, DK, BE-VGL, SE)

Duration and results

The research projects have started in 2013 and have a duration of max 36 months. First results will become available in 2014. Final results on the projects funded by the Electromobility+ initiative will be presented during the final event scheduled for spring 2015.

For more information, visit <http://electromobility-plus.eu>